



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,622	12/20/2001	Ki-Taek Kim	SCH-0008	1198
34610	7590	06/06/2006	EXAMINER	
FLESHNER & KIM, LLP			HAILE, FEBEN	
P.O. BOX 221200			ART UNIT	
CHANTILLY, VA 20153			PAPER NUMBER	
			2616	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/022,622

Applicant(s)

KIM, KI-TAEK

Examiner

Feben M. Haile

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-12 and 14 is/are allowed.
- 6) ☒ Claim(s) 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. In view of applicant's amendment filed April 27, 2006, the status of the application is still pending with respect to claims 1-17.
2. Claims 1-3 and 13 have been cancelled, thus the Examiner has withdrawn them from consideration.
3. The amendment filed is sufficient to overcome the rejection of claims 4 & 10-12 and the objection of claims 5-9 & 14 based upon the Applicant amending the claims with the limitations from claim 13, deemed allowable by the Examiner.
4. The amendment filed is insufficient to overcome the rejection of claims 15-17 based upon Hann (US 6,751,233) and Yoo (US 6,175,567), as set forth in the last Office action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2616

5. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hann (US 6,751,233), hereinafter referred to as Hann in view of Yoo (US 6,175,567), hereinafter referred to as Yoo.

Regarding claim 15, Hann discloses controller monitoring and controlling the entire subscriber unit (**figure 2 units 50 & 25; a master controller**); first-in first-out memory (FIFO) manager connected said controller or transmitting and receiving cells to/from said controller (**figure 2 units 52 & 24 and column 3 lines 12-14; a UTOPIA 2 to UTOPIA 3 controller includes a FIFO buffer**); reception FIFO means for temporarily storing a cell received from a different ATM exchange and transmitting the stored cell to said FIFO manger (**figure 2 unit 23 and column 3 lines 15-30; data is sent from a modem to a UTOPIA 3 PHYS receiver, which in turn transmits it to the UTOPIA 2 to UTOPIA 3 controller**); and transmission FIFO means for temporarily storing a cell transmitted from said FIFO manager and transmitting the stored cell externally (**figure 2 unit 54 and column 4 lines 14-30; the UTOPIA 2 to UTOPIA 3 controllers transfers data from its buffer to a UTOPIA 3 PHYS transmitter**).

Hann fails to teach discarding abnormal cells operation and recovering subscriber cell synchronization.

Yoo discloses a method of receiving a cell, checking if there is a cell start command and if cell synchronization is correct, and if there is no cell start command and the cell synchronization is not correct, then discard the cell (**column 6 lines 55-62**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method taught by Yoo into Hann's master

controller. The motivation for such a modification being an efficiently system and method for managing cell in an ATM exchange.

**Regarding claim 16**, Hann discloses wherein said reception FIFO means includes four FIFOs for inputting and outputting cells (column 4 lines 50-52; each UTOPIA 3 PHYS device has a two cell FIFO for reading and writing into; it would have been a manner of design choice to have more FIFOs).

**Regarding claim 17**, Hann discloses wherein said transmission FIFO means includes four FIFOs for inputting and outputting cells (column 4 lines 50-52; each UTOPIA 3 PHYS device has a two cell FIFO for reading and writing into; it would have been a manner of design choice to have more FIFOs).

#### ***Allowable Subject Matter***

6. Claims 4-12 and 14 allowed. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose, teach, or fairly suggest wherein said discarding includes: setting to 0 all bytes to be transmitted under the condition that said synchronization loss signal is not set if the current cell in transmission is abnormal; and setting no transmission synchronous signal and then returning to said transmitting.

#### ***Response to Arguments***

7. Applicant's arguments filed April 27, 2006 have been fully considered but they are not persuasive.

**On page 10 of the amendment**, the Applicant respectfully traverses that none of the cited references taken alone or in any proper combination disclose, suggest or render obvious a controller for monitoring and controlling the entire operation of the subscriber unit, discarding abnormal cells and receiving cell synchronization. The Examiner respectfully disagrees with the Applicant. Hann teaches a system that includes a receive side and a transmit side, where both sides have their own UTOPIA 2 master. Each of the masters is responsible for the transmission of a cell on their end. It is obvious to one of ordinary skill in the art that can be interpreted as controlling the operation of the subscriber unit. Yoo teaches a procedure for the handling of a cell where a cell is received, checked for a cell start command and if cell synchronization is correct, and if there is not cell start command and the cell synchronization is not correct, then discarding the cell. It would have been obvious to one having ordinary skill in the art that since both Hann and Yoo deal with the transmission of a cell, the method of Yoo could be incorporated into Hann's master.

**On page 10 of the amendment**, the Applicant respectfully traverses that none of the cited references taken alone or in any proper combination disclose, suggest or render obvious a FIFO manager connected to the controller. The Examiner respectfully disagrees with the Applicant. Hann teaches a UTOPIA 2-3 controller, connected to the UTOPIA 2 master, which includes a UTOPIA 3 controller master for controlling reception/transmission of cells into FIFO's.

**On page 11 of the amendment**, the Applicant respectfully traverses that none of the cited references taken alone or in any proper combination disclose, suggest or

render obvious a reception FIFO means for temporarily storing a cell received from a different ATM exchange and transmitting the stored cell to the FIFO manager. The Examiner respectfully disagrees with the Applicant. Hann teaches a receiver UTOPIA 2-3 controller that includes a UTOPIA 2 controller for managing the reception/transmission of cells in FIFO's to/from the UTOPIA 3 controller master.

On page 11 of the amendment, the Applicant respectfully traverses that none of the cited references taken alone or in any proper combination disclose, suggest or render obvious a transmission FIFO means for temporarily storing a cell transmitted from the FIFO manager and transmitting the stored cell externally. The Examiner respectfully disagrees with the Applicant. Hann teaches a transmitter UTOPIA 2-3 controller that includes a UTOPIA 2 controller for managing the reception/transmission of cells in FIFO's to/from the UTOPIA 3 controller master.

### ***Conclusion***

**8. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2616

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M. Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 6:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JH 061012006

  
RICKY Q. NGO  
SUPERVISORY PATENT EXAMINER